# International Workshop on Embedded Artificial Intelligence Devices, Systems, and Industrial Applications (EAI)

Milan, Italy 19 September 2022

ECSEL AI4DI stands for "Artificial Intelligence for Digitizing Industry"

AI4DI's mission is bringing AI from the cloud to the edge and making Europe a leader in silicon-born AI by advancing Moore's law and accelerating edge processing adoption in different industries through reference demonstrators.
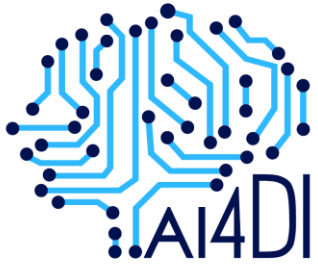
Start **May 2019**	End **Dec 2022**
Duration **44M**	Budget **30€M**
Partners **41**	Countries **12**

🌐 https://www.ai4di.eu
in linkedin.com/company/ai4di

Machinery

Automotive Manufacturing

Collaborative
Understanding AI in common

Semiconductor-Industry
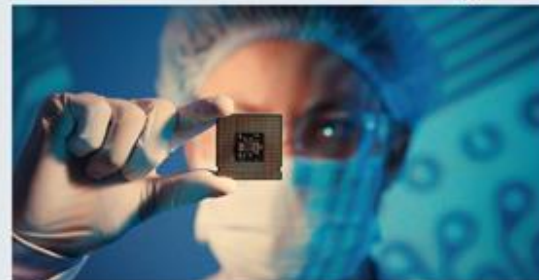
Beverage Industry & Agriculture

Transportation
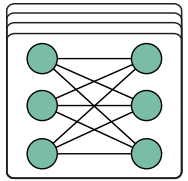
TEMPO is a collaborative research project which develops technologies and hardware solutions to broaden the applicability and strengthen the European ecosystem of embedded neuromorphic computing, enabling AI in Edge devices and applications.
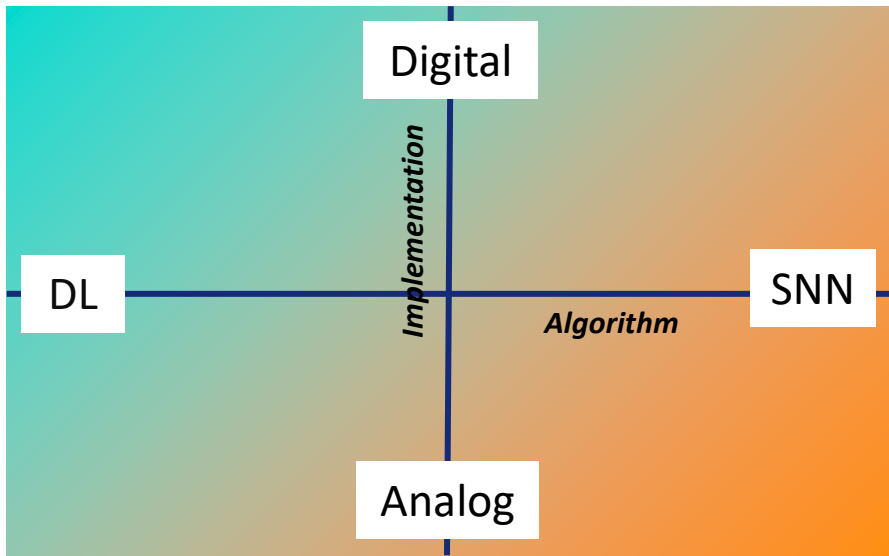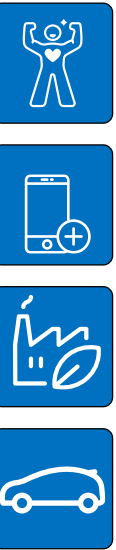
Neuromorphic technologies → **Neuromorphic architectures** → **Neuromorphic algorithms** → **Integration and demonstration**

Start	End
May **2019**	Jan **2023**

Duration	Budget
45M	**35€M**

Partners	Countries
18	**5**

Present — *Production-ready maturity* — Future

https://tempo-ecsel.eu
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SCAN ME
to visit website

ANDANTE aims to leverage innovative IC designs to build powerful **HW&SW platforms** for artificial and spiking neural networks (**ANN/SNN**) as a basis for future products in the **Edge IoT domain**, combining extreme power efficiency with robust neuromorphic computing capabilities and demonstrate them in key application areas.
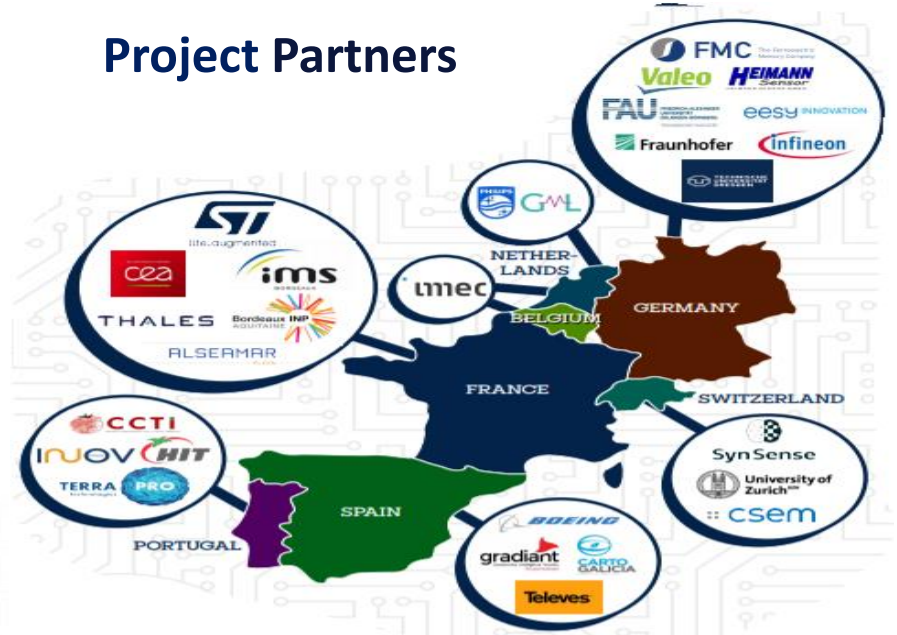
Main focus

Emerging eNVM memories

- OxRAM,
- PCM
- FeFET,
- SOT-MRAM

Tools & Methodologies

- SW-HW co-design
- Training, profiling and mapping a neural network on a HW target

Neuromorphic ASICs & FPGAs

- SNN and ANN architectures
- Digital, mixed-signal design strategies

AI Platforms & Applications

- Validate, and evaluate performance
- Solutions pertinence

ANDANTE targets innovative solutions in the Edge with strong market impact

Digital Industry

Digital Farming

Transport & Smart Mobility

Healthcare

Digital Life

Project Partners

NETHER-LANDS

GERMANY

BELGIUM

FRANCE

SWITZERLAND

SPAIN

PORTUGAL

Project facts and figures

Start June 2020	End Nov 2023	Duration 42 Months	Budget 40 €M	Partners 30	Countries 7

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